



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,904	08/29/2001	Ulrika Hagrud	000500-299	5309

21839 7590 11/20/2002

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

ANDERSON, CATHARINE L

ART UNIT PAPER NUMBER

3761

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,904

Applicant(s)

HAGRUD, ULRIKA

Examiner

C. Lynne Anderson

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12 September 2002 have been fully considered but they are not persuasive.

With respect to the applicant's argument that Lynard et al. (WO 98/27904) fails to disclose a liquid transfer sheet that is compressed at the bonding locations, Lynard et al. show in figure 2 a liquid transfer sheet 44 that is compressed at bonding locations 52.

With respect to the applicant's argument that Meierhoefer (4,104,214) fails to disclose a superabsorbent material, Meierhoefer discloses an absorbent body comprising about 1 to about 20 percent by weight of a superabsorbent material, an acrylic acid-based polymer, as described in column 3, lines 3-8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynard et al. (WO 98/27904) in view of Meierhoefer (4,104,214).

Lynard discloses all aspects of the claimed invention but remains silent as to the type of superabsorbent material comprising the absorbent body. Lynard discloses an absorbent article 20, as shown in figure 1, comprising a liquid impermeable backing

Art Unit: 3761

sheet 40, an absorbent body 42, and a top sheet 38. The top sheet 38 comprises a liquid permeable, fibrous sheet of material, including thermoplastic material, as described on page 7, lines 4-11. A liquid transfer sheet 44 is located between the top sheet 38 and the absorbent body 42, as shown in figure 2. The liquid transfer sheet 44 comprises a liquid permeable, porous and resilient sheet of material, as described on page 8, lines 25-38. The top sheet 38 and liquid transfer sheet 44 are fused together at bonding locations 52 to form a laminate, as described on page 10, line 30-31. The liquid transfer sheet 44 is compressed at the bonding locations 52, as shown in figure 2. The absorbent body 42 comprises superabsorbent material, as described on page 14, lines 27-28.

Meierhoefer discloses a superabsorbent material for use as the absorbent body of an absorbent article, as described in column 7, lines 18-23. The superabsorbent material disclosed by Meierhoefer is an acrylic acid-based polymer, as described in column 2, lines 41-50. The superabsorbent material is partially neutralized, as described in column 3, lines 8-13. The superabsorbent material has a pH of about 5 to 7.5, as described in column 3, lines 64-66, so as not to cause irritation to the wearer of the absorbent article, as described in column 3, lines 54-60.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the absorbent body of Lynard with the partially neutralized superabsorbent material of Meierhoefer so the absorbent body will not cause irritation to the wearer.

With respect to claim 2, the bonding locations 52 are grouped into lines, the space between the bonding locations 52 of a group being less than the space between the bonding locations 52 of a neighboring group, as shown in figure 1.

With respect to claim 3, the absorbent body has a pH of between about 5 and 7.5, as described by Meierhoefer in column 3, lines 64-66.

With respect to claim 4, the bonding locations 52 are circular bonds, as shown in figure 1.

With respect to claim 5, the top sheet 38 has through-penetrating holes within the bonding locations, as shown in figure 2.

With respect to claim 6, the top sheet 38 is comprised of a nonwoven material, as described on page 7, lines 4-5.

With respect to claim 7, Lynard fails to disclose the type of nonwoven material that may be used to construct the top sheet 38. It would have been an obvious matter of design choice to construct the top sheet from a carded, thermobonded nonwoven material, as the applicant has not shown that this type of nonwoven serves any particular purpose or solves any stated problem, and it appears the invention would perform equally well with other nonwoven materials.

With respect to claim 8, Lynard discloses the absorbent article 20 as being 3mm thick on page 6, lines 16-20. According to the cross section of figure 2, the liquid transfer sheet 44 is therefore about 0.6 mm thick. Lynard further discloses the absorbent article 20 as being thicker than 3 mm, and the liquid transfer sheet 44 would therefore be thicker as well.

Art Unit: 3761

With respect to claims 9 and 10, the bonding locations 52 are arranged in mutually adjacent groups forming lines. The distance between the bonding locations 52 within a line (y) is about 1 mm, as measured in figure 1, and the distance between the bonding locations 52 in adjacent lines (x) is about 2 mm, giving an x/y ratio of 2/1.

With respect to claim 11, the bonding locations 52 are about 1.5 mm in diameter, as described on page 11, lines 26-27. According to figure 1, the distance between the bonding locations 52 within a line (y) is about 1.5 mm, and the distance between bonding locations 52 in adjacent lines (x) is about 3 mm. It would have been an obvious matter of design choice to make the distance between bonding locations within a group 1 mm, as the applicant has not shown that this distance serves any particular purpose or solves any stated problem, and it appears the invention would perform equally well with a distance of 1.5 mm between bonding locations.

With respect to claim 12, the absorbent article 20 is a sanitary napkin, as shown in figure 1.

With respect to claim 13, it would have been obvious to one of ordinary skill in the art at the time of invention to have the pH of the absorbent body be in the range of 4.1 to 4.7, since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,330,456 discloses acrylic acid-based polymers as being superabsorbent material.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone numbers for

Art Unit: 3761


the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

CWA

cla

November 6, 2002



DENNIS RUHL
PRIMARY EXAMINER